

#### DEPARTMENT OF THE NAVY

OFFICE OF THE CHIEF OF NAVAL OPERATIONS WASHINGTON. DC 20350-2000

IN REPLY REFER TO

OPNAVINST 3360.30B N86 17 June 1994

#### OPNAV INSTRUCTION 3360.30B

From: Chief of Naval Operations

Subj: SHIP ANTISUBMARINE WARFARE READINESS/EFFECTIVENESS

MEASURING (SHAREM) PROGRAM

1. <u>Purpose</u>. To establish procedures to manage and conduct the Ship ASW Readiness/Effectiveness Measuring (SHAREM) Program. This instruction has been substantially revised and should be reviewed in its entirety.

- 2. Cancellation. OPNAVINST 3360.30A and OPNAV 3360-5.
- 3. Aim. The overall objective of the SHAREM Program is collection and analysis of high-quality data to quantitatively assess surface ship Anti-Submarine Warfare (ASW) readiness and effectiveness. This is achieved by the accomplishment of the following program goals:
- a. Meet Chief of Naval Operations (CNO) and fleet requirements for high-quality data collection to document the tactical performance and employment of surface ship ASW systems, which operate independently and in concert with systems in other ASW platforms.
- b. Identify and develop solutions for tactical problems connected with employment of surface ASW systems through analysis of accumulated data.
- c. Produce recommendations for effective employment of weapons and sensors, and improvements to tactics.
- d. Maintain a computerized SHAREM database that is comprehensive and responsive to fleet and CNO requirements for tactical and technical data.
- 4. <u>Method</u>. SHAREM program goals are accomplished through design, conduct, reconstruction and analysis of at-sea exercises. SHAREM exercises will support evaluation of all naval warfare

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environments, from littoral shallow water to open-ocean, deep water warfare. Evaluation of threats and environments of national interest recommended by the numbered Fleet and Type Commanders and directed by CNO (N86), will lead to the development of threat and site specific ASW tactics and collection of tactically significant environmental data. Environmental data collection will be accomplished in coordination with Naval Laboratories, system commands and the Naval Oceanographic Office. SHAREM will reflect the current maritime strategy in the accomplishment of the program goals.

SHAREM will conduct and analyze exercise data to assess the cue through detect sequence through combination exercises either on a range or in an environment that reflects the threat/site of interest. Detection exercises are to be designed to examine acoustic and non-acoustic sensor performance and employment over the full scope of the ASW process from cueing and initial detection/redetection, classification, localization to attack. Exercise design will also consider Command and Control effectiveness, vulnerability to counter-detection, and ability to tactically exploit the environment. Attack exercises are to be designed to examine surface ship attack tactics, fire control accuracy, torpedo performance and ship vulnerability to submarine torpedo attack to include tactics and countermeasures to defeat submarine torpedo attack. Specific objectives are to be formulated for each exercise. Data is to be collected in both structured and freeplay scenarios to accomplish these objectives.

5. SHAREM Program Organization. The SHAREM organization members and their primary responsibilities are:

#### a. CNO (N86)

- (1) Act as SHAREM Program and Resource Sponsor.
- (2) Convenes and chairs annual program plan review.
- (3) Approves SHAREM 6-Year Plan, including program objectives, budget and exercise schedule.
- (4) Approves analysis products produced for outside agencies from the SHAREM database.

# b. Program Executive Office, Undersea Warfare (PEO-USW)

(1) Act as SHAREM Resource Manager.

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- (2) Reviews annual program plan, budget and exercise schedule and recommends changes to CNO (N86).
- (3) Establishes and prioritizes special data collection requirements to CNO (N86).
- (4) Provides funding for the SHAREM program as directed by CNO (N86).

### c. Commander, Surface Warfare Development Group (COMSURFWARDEVGRU)

- (1) Act as SHAREM Executive Agent.
- (2) Develops and submits to CNO, via PEO-USW, the annual SHAREM 6-Year Plan.
- (3) Conducts liaison necessary to solicit recommendations from CNO, Fleet and Type Commanders, Naval Laboratories, system commands and the Naval Oceanographic Office for the annual SHAREM program plan review as well as support the annual SHAREM exercise schedule.
- (4) Contracts for outside services and establishes memoranda of agreement necessary to support COMSURFWARDEVGRU in the accomplishment of program goals.
- (5) Drafts operations orders, letters of instruction and other exercise planning materials for promulgation by the Fleet Commanders. Develops and promulgates test and data collection plans for each exercise.
- (6) Coordinates observers for SHAREM exercises and oversees data collection efforts.
- (7) Advises the Fleet Commanders on the execution of the test plan.
- (8) Conducts post-exercise Tactical Information Management System (TIMS) reconstruction and analysis; prepares and publishes program products as required.
- (9) Maintains and validates the SHAREM database. Recommends to CNO (N86) any changes in the data collection requirements.

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- $\,$  (10) Conducts cross-SHAREM analysis and publishes periodic reports.
- (11) Responds to request for analysis products derived from the SHAREM database by outside activities as directed by CNO (N86).
- d. Other ad hoc members of the SHAREM program organization include COMNAVSURFLANT, COMNAVSURFPAC, the numbered Fleet Commanders, Naval Laboratories and support activities. Naval Laboratories provide support for pre-exercise planning and post-exercise technical analysis, including assessments of the environment and system performance. Designated tactical commanders will be invited to present unit and squadron ASW concerns. Representation from the air and submarine communities (e.g., COMSUBDEVRON TWELVE, AIREM) is also to be solicited in the interests of cooperative ASW research.

## 6. SHAREM Long-Range Planning Process

- a. SHAREM program policy and focus will be established at the annual SHAREM program plan review held during the first quarter of each fiscal year. COMSURFWARDEVGRU will liaise with Fleet and Type Commanders, Naval Laboratories, system commands, and the Naval Oceanographic Office for input to the SHAREM program goals, exercise objectives and schedule for the next year. As far as possible, sufficient details of firm exercise opportunities for the following 15 months shall be provided when solicited by COMSURFWARDEVGRU to enable advanced planning and commitment of SHAREM assets. This should include projected exercise dates, location, scenario, objectives and participants. COMSURFWARDEVGRU will consolidate all inputs and present them for discussion at the program plan review.
- b. CNO's representative shall chair the annual SHAREM program plan review attended by representatives of PEO-USW and COMSURFWARDEVGRU. The main topics to be covered during the meeting are:
  - (1) Review SHAREM exercises of previous year.
  - (2) Review SHAREM budget and products of previous year.
- (3) Present ad hoc members' concerns for direction of SHAREM program.
  - (4) Review and update/affirm SHAREM program objectives.

- (5) Confirm SHAREM exercise schedule for present year.
- (6) Establish exercise objectives and schedule for next year.
  - (7) Identify and resolve programmatic issues.
- c. The principal objective of the annual SHAREM program plan review will be the review and annual assurance of the SHAREM 6-Year Plan. The most important facet of this review is early commitment by the Fleet, Type, and Operational Commanders to SHAREM exercises.
- d. Within 1 month after the annual program plan review COMSURFWARDEVGRU will draft a summary message for release by CNO. This message will present the results of the meeting and serve as a record of the exercise schedule proposed at the meeting. Once approved and revised by CNO, this will be the basis of COMSURFWARDEVGRU's direct liaison with Type, Fleet and Operational Commanders, and Navy Laboratories for detailed exercise planning.

### 7. SHAREM 6-Year Plan

- a. The SHAREM 6-Year Plan will be submitted by COMSURFWARDEVGRU and forwarded to CNO for action/approval, via PEO-USW, before the end of the second quarter of the fiscal year. Once approved, it will be issued to members of the SHAREM program organization and will constitute the authority for SHAREM activity in the coming year.
  - b. The main components of the SHAREM 6-Year Plan are:
    - (1) Background and review of SHAREM program.
    - (2) Program objectives for coming year.
    - (3) Tasks to be accomplished by the program.
    - (4) Material support requirements.
    - (5) Program costs.
    - (6) SHAREM exercise schedule for coming year.
- c. The program objectives listed in the SHAREM 6-Year Plan are general in nature, dictated by the overall program goals. These are to be reviewed, as necessary, at the annual SHAREM

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program plan review and updated to support the U.S. Navy goals and objectives and the concerns of the ASW community. They are to be sufficiently broad to cover the spectrum of ASW activity in terms that will be relatively stable and will accommodate the specific objectives of individual exercises. The program tasks listed in the SHAREM 6-Year Plan are to be those specific items to be accomplished in the planning, execution, reconstruction and analysis of the proposed schedule of exercises. The program is to be costed for the completion of these tasks. The schedule of SHAREM exercises is to be given both in the form of a generic schedule, to represent the typical or intended level-of-effort, and specific schedule to represent the proposed exercises known at that time. Program costs are to be presented by task for each exercise and as an aggregate amount for the coming year. An appropriate inflation factor is to be applied to projected costs for out-years. Budget requirements shall be recommended in accordance with the objectives and schedule generated from the annual SHAREM program plan review.

- 8. Detailed Exercise Planning and Coordination. On approval of the SHAREM program plan review summary message, COMSURFWARDEVGRU will liaise directly with Fleet, Type, and Operational Commanders as well as Naval Laboratories, system commands and the Naval Oceanographic Office for detailed exercise planning. This planning will deal with every aspect of the exercise which pertains to SHAREM and will provide to the Officer Scheduling the Exercise (OSE) and the Officer Conducting the Exercise (OCE) draft messages and other associated planning materials. COMSURFWARDEVGRU will solicit Naval Laboratories for desired participation in SHAREM exercises and will work with the OSE and OCE to accommodate Laboratory requirements within the established scenario of the exercise.
- 9. Program Products. The SHAREM program will collect high-quality data on performance of surface ship ASW systems and tactics. Analysis conducted on these data will be presented in terms of Measures of Effectiveness (MOEs) approved by the program sponsor. Particular attention shall be paid to analysis which reveals needed improvements to system performance or tactics. The output of the program is to be provided by COMSURFWARDEVGRU in the following forms:
- a. Quicklook Message Summary. To be revised within 10 working days of the end of the exercise summarizing known results. These will be preliminary analysis results based on un-

rectified Global Positioning System tracks and shall be caveated as such. This message shall be sent to all participants, planning group members, interested activities and to AIG 13752.

- b. Exercise Brief. To be completed within 60 days of the exercise for presentation to CNO. This will review the Quicklook Message and will include any additional analysis conducted to that point. This brief will also be made available to the Fleet Commander requesting the exercise, the OSE and OCE, and exercise participants, as desired.
- c. Exercise Reconstruction and Analysis Report (R&A). To be completed within 6 months of selected exercises. This report is to include the results of complete reconstruction and analysis, but need not replicate data in the SHAREM database. It is to be produced in a standard format, as established by COMSURFWARDEVGRU, for the sake of consistency and comparability. The R&A report will supplement the SHAREM database and provide answers to questions on exercise conduct, analysis methodology and analysis results to complement the database entries. It shall be distributed to the exercise participants and a standard list of addressees approved by CNO.
- d. Data Analysis Report (DAR). A DAR will be submitted 60 days after completion of selected exercises. This report, unlike the R&A report, will concentrate on a specific objective rather than all of the SHAREM standard and supporting objectives. The report will be produced in a standard COMSURFWARDEVGRU format and will supplement SHAREM database entries. A DAR may be directed in lieu of an R&A report for a reduced level of effort.
- e. Exercise Technical Analysis Report. Whenever the nature of the particular exercise requires technical analysis beyond the capability or scope of the SHAREM team at SURFWARDEVGRU, COMSURFWARDEVGRU shall task the appropriate Navy Laboratory to conduct a supplementary report covering those technical aspects of the exercise. The specific topic, scope, and format shall be determined by COMSURFWARDEVGRU.
- f. Exercise Data Report. Exercise data will be validated and entered into the SHAREM database after approval of the R&A and/or DAR report. This data consist of data collected during the exercise and that which resulted from reconstruction and analysis efforts. Following completion of data entry and validation a listing of all data collected during the exercise and available upon approved request through CNO, shall be distributed to a standard list of addressees.

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Distribution:

- q. Cross-SHAREM Analysis Report. Periodic analysis shall be done on fundamental SHAREM objectives and other selected topics to identify trends. Topics for analysis shall be solicited prior to the annual SHAREM program plan review and chosen by COMSURFWARDEVGRU in consultation with the program sponsor. Some of these topics may require subcontracting of this effort to Navy Laboratories, as appropriate, to benefit from their technical expertise. The distribution of these reports shall be in accordance with the standard distribution list. At least four cross-SHAREM analyses shall be attempted each year.
- TACMEMOs and TACNOTEs. Cross-SHAREM analyses which indicate an area of tactical interest which requires further analysis, a deficiency in extant tactical doctrine, or a need for new doctrine, shall be pursued as appropriate. Development of new or improved tactical doctrine shall be coordinated with concurrent ASW TAC D&E efforts and ASW Feedback program at SURFWARDEVGRU.
- 10. Action. CNO will delegate exact details on implementation of all program objectives and all report requirements to COMSURFWARDEVGRU. CNO will maintain final approval authority on all report formats.

P. J. COADY DIRECTOR, SURFACE WARFARE DIVISION

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